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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 5

Complete if Known

Application Number	10/510,276-Conf. #9537
Filing Date	August 22, 2005
First Named Inventor	Robyn O'HEHIR
Art Unit	1644
Examiner Name	N. M. Rooney
Attorney Docket Number	JKJ-003US

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ³
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	B1	WO-89/09260-A1	10-05-1989	The University of Melbourne		
	B2	WO-92/03550-A1	03-05-1992	The University of Melbourne		
	B3	WO-93/04174-A1	03-04-1993	The University of Melbourne		
	B4	WO-94/04564-A1	03-03-1994	The University of Melbourne		
	B5	WO-95/06728-A1	03-09-1995	Immologic Pharmaceutical Corporation		

Examiner Signature	Date Considered
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NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	Attwood, Teresa K., "The Babel of Bioinformatics," <i>Science</i> , Vol. 290(5491):471-473 (2000)	
	C2	Blaher, Bella et al, "Identification of T-cell epitopes of Lol p 9, a major allergen of ryegrass (<i>Lolium perenne</i>) pollen," <i>J. Allergy Clin. Immunol.</i> , Vol. 98:124-132 (1996)	
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	C4	Bose, et al. Production and characterization of mouse monoclonal antibodies to allergenic epitopes on Lolp1 (Rye I). <i>Immunology</i> . 1986 Oct;59(2):309-15.	
	C5	Bowie et al., "Deciphering the message in protein sequences: tolerance to amino acid substitutions," <i>Science</i> , Vol. 247(4948):1306-1310 (1990)	
	C6	Brieva, et al. Rapid purification of the main allergen of <i>Lolium perenne</i> by high-performance liquid chromatography. <i>J Chromatogr</i> . 1986 Nov 26;370(1):165-72.	
	C7	Burgess et al., "Possible Dissociation of the Heparin-binding and Mitogenic Activities of Heparin-binding (Acidic Fibroblast) Growth Factor-1 from Its Receptor-binding Activities by Site-directed Mutagenesis of a Single Lysine Residue," <i>J. Cell. Biol.</i> , Vol. 111:2129-2138	

/Nora Rooney/

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		(1990)	
C8	Burton, Matthew D. et al. "T-cell receptor contact and MHC binding residues of a major rye grass pollen allergen T-cell epitope." <i>J. Allergy Clin. Immunol.</i> , Vol. 103:255-261 (1999)		
C9	Chakrabarty S, et al. Detection of cross-reactive allergens in Kentucky bluegrass pollen and six other grasses by crossed radioimmuno-electrophoresis. <i>Int Arch Allergy Appl Immunol.</i> 1981;68(2):142-57.		
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C11	Comfort, et al. IgE-binding proteins from pine (<i>Pinus radiata</i> D. Don) pollen: evidence for cross-reactivity with ryegrass (<i>Lolium perenne</i>). <i>Int Arch Allergy Appl Immunol.</i> 1990;93(1):41-6.		
C12	Cottam, et al. Immunological properties of chemically produced fragments of rye grass pollen extract. <i>Immunol Lett.</i> 1988 Apr;17(4):345-9.		
C13	Cottam, et al. Physicochemical and immunochemical characterization of allergenic proteins from rye-grass (<i>Lolium perenne</i>) pollen prepared by a rapid and efficient purification method. <i>Biochem J.</i> 1986 Mar 1;234(2):305-10.		
C14	de Lalla, Claudia et al. "Cutting Edge: Identification of Novel T Cell Epitopes in Lol p5a by Computational Prediction." <i>The Journal of Immunology</i> , Vol. 163:1725-1729 (1999)		
C15	Ellis. New Technologies for Making Vaccines. <i>Vaccines.</i> 1988, W.B. Saunders Company. pp. 568-575.		
C16	Esch, et al. Isolation and characterization of a major cross-reactive grass group I allergenic determinant. <i>Mol Immunol.</i> 1989 Jun;26(6):557-61.		
C17	Freidhoff, et al. Association of HLA-DR3 with human immune response to Lol p I and Lol p II allergens in allergic subjects. <i>Tissue Antigens.</i> 1988 Apr;31(4):211-9.		
C18	Freidhoff, et al. A study of the human immune response to <i>Lolium perenne</i> (rye) pollen and its components, Lol p I and Lol p II (Rye I and Rye II). II. Longitudinal variation of antibody levels in relation to symptomatology and pollen exposure and correction of seasonally elevated antibody levels to basal values. <i>J Allergy Clin Immunol.</i> 1987 Nov;80(5):646-55.		
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C20	Griffith, et al. Cloning and sequencing of Lol pl, the major allergenic protein of rye-grass pollen. <i>FEBS Lett.</i> 1991 Feb 25;279(2):210-5.		
C21	Hatton, et al. Molecular Cloning of Kentucky Bluegrass Pollen Allergens. <i>J. Allergy Immunology.</i> 1988. 81(1):183.		
C22	Hill, et al. Specific cellular and humoral immunity in children with grass pollen asthma. <i>Clin Allergy.</i> 1982 Jan;12(1):83-9.		
C23	Hopp, et al. Prediction of protein antigenic determinants from amino acid sequences. <i>Proc Natl Acad Sci U S A.</i> 1981 Jun;78(6):3824-8.		
C24	Howlett, et al. Cross-reactivity between Acacia (wattle) and rye grass pollen allergens. Detection of allergens in Acacia (wattle) pollen. <i>Clin Allergy.</i> 1982 May;12(3):259-68.		
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Substitute for form 1449/PTO <h2 style="text-align: center; margin: 0;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center; margin: 0;">(Use as many sheets as necessary)</p>			Complete if Known <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Application Number</td> <td>10/510,276-Conf. #9537</td> </tr> <tr> <td>Filing Date</td> <td>August 22, 2005</td> </tr> <tr> <td>First Named Inventor</td> <td>Robyn O'HEHIR</td> </tr> <tr> <td>Art Unit</td> <td>1644</td> </tr> <tr> <td>Examiner Name</td> <td>N. M. Rooney</td> </tr> <tr> <td>Attorney Docket Number</td> <td>JKJ-003US</td> </tr> </table>		Application Number	10/510,276-Conf. #9537	Filing Date	August 22, 2005	First Named Inventor	Robyn O'HEHIR	Art Unit	1644	Examiner Name	N. M. Rooney	Attorney Docket Number	JKJ-003US
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		and NH2-terminal sequences of the group V allergens from <i>Lolium perenne</i> , <i>Poa pratensis</i> and <i>Dactylis glomerata</i> . <i>Clin Exp Allergy</i> . 1992 Apr;22(4):491-7.	
	C27	Kumar, et al. Amino acid variations at a single residue in an autoimmune peptide profoundly affect its properties: T-cell activation, major histocompatibility complex binding, and ability to block experimental allergic encephalomyelitis. <i>Proc Natl Acad Sci U S A</i> . 1990 Feb;87(4):1337-41.	
	C28	Lazar et al., "Transforming Growth Factor alpha: Mutation of Aspartic Acid 47 and Leucine 48 Results in Different Biological Activities," <i>Mol. Cell. Biol.</i> , Vol. 8(3):1247-1252 (1988)	
	C29	Lin, et al. Isolation and characterization of <i>Poa p</i> I allergens of Kentucky bluegrass pollen with a murine monoclonal anti-Lol p I antibody. <i>Int Arch Allergy Appl Immunol</i> . 1988;87(3):294-300.	
	C30	Lin, et al. Mapping of epitopes on <i>Poa p</i> I and <i>Lol p</i> I allergens with monoclonal antibodies. <i>Int Arch Allergy Appl Immunol</i> . 1990;91(3):217-23.	
	C31	Lowenstein, et al. Immunological partial identity and in vitro inhibitory effect of two major timothy pollen allergens to whole pollen extract of four grasses. <i>Int Arch Allergy Appl Immunol</i> . 1978;57(4):379-83.	
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	C33	Lowenstein, et al. Purification of timothy pollen allergens followed by quantitative immunoelectrophoresis. <i>Int Arch Allergy Appl Immunol</i> . 1975;49(1-2):95-8.	
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	C36	Marsh, et al. Induction of IgE-mediated immediate hypersensitivity to group I rye grass pollen allergen and allergoids in non-allergic man. <i>Immunology</i> . 1972 Jun;22(6):1013-28.	
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	C40	Mecheri, et al. Purification and characterization of a major allergen from <i>Dactylis glomerata</i> pollen: the Ag Dg1. <i>Int Arch Allergy Appl Immunol</i> . 1985;78(3):283-9.	
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	C42	Mourad, et al. Allergenicity and cross-reactivity of rye grass pollen extracts revealed by monoclonal antibodies. <i>J Immunol Methods</i> . 1986 May 1;89(1):53-9.	
	C43	Mourad, et al. Mapping of Lol p I allergenic epitopes by using murine monoclonal antibodies. <i>Mol Immunol</i> . 1989 Nov;26(11):1051-7.	
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	C45	Ngo et al., "Computational Complexity, Protein Structure Prediction, and the Levinthal Paradox," <i>The Protein Folding Problem and Tertiary Structure Prediction</i> , Ed. K. Merz and S.	

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		Le Grand, Boston: Birkhauser, pgs. 491-495 (1994)	
C46		Olsen, et al. Identification and characterization of the Poa p IX group of basic allergens of Kentucky bluegrass pollen. J Immunol. 1991 Jul 1;147(1):205-11.	
C47		Ong, Eng Kok et al, "Cloning of a cDNA encoding a group-V (group-IX) allergen isoform from rye-grass pollen that demonstrates specific antigenic immunoreactivity," Gene, Vol. 134: 235-240 (1993)	
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C50		Schramm et al., "Allergen Engineering," Variants of the Timothy Grass Pollen Allergen Phl p 5b with Reduced IgE-Binding Capacity but Conserved T Cell Reactivity," J. Immunol., Vol. 162:2406-2414 (1999)	
C51		Silvanovich, et al. Nucleotide sequence analysis of three cDNAs coding for Poa p IX isoallergens of Kentucky bluegrass pollen. J Biol Chem. 1991 Jan 15;266(2):1204-10.	
C52		Singh, et al. Grass pollen allergens: antigenic relationships detected using monoclonal antibodies and dot blotting immunoassay. Int Arch Allergy Appl Immunol. 1985;78(3):300-4.	
C53		Singh, et al. Isolation of cDNA encoding a newly identified major allergenic protein of rye-grass pollen: intracellular targeting to the amyloplast. Proc Natl Acad Sci U S A. 1991 Feb 15;88(4):1384-8.	
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C55		Skolnick, Jeffrey et al., "From genes to protein structure and function: novel applications of computational approaches in the genomic era," Trends in Biotech., Vol. 18:34-39 (2000)	
C56		Smart, et al. Development of monoclonal mouse antibodies specific for allergenic components in ryegrass (Lolium perenne) pollen. Int Arch Allergy Appl Immunol. 1983;72(3):243-8.	
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C65	Van Ree, et al. Characterization with monoclonal and polyclonal antibodies of a new major allergen from grass pollen in the group I molecular weight range. J Allergy Clin Immunol. 1989 Jan;83(1):144-51.	
C66	Ventas, et al. OP46: Monoclonal Antibodies to a Major Allergen from Lepidoglyphus Destructor. Clin. Experimental Allergy. 1990. 20:47.	
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C68	Walsh, et al. Cloning of cDNA coding for an allergen of Cocksfoot grass (Dactylis glomerata) pollen. Int Arch Allergy Appl Immunol. 1989;90(1):78-83.	
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C71	Zhang, et al. Crossreactivity and Variable Allergenicity of a Poa p IX Allergen. J. Allergy. 1991. 87:325.	

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